AQUEOUS DISPERSIONS AND AQUEOUS ELECTRODEPOSITABLE PRIMERS

ABSTRACT

The invention relates to aqueous dispersions and aqueous electrodepositable primers made with the aqueous dispersions of the invention. The aqueous dispersion of the invention requires the use of a polymer (a) comprising one or more water dispersible groups per molecule and one or more functional groups (f), and at least one crosslinking agent (b) comprising one or more blocked functional groups (f_b) reactive with polymer (a) after unblocking. Crosslinking agent (b) has a T_g of from 40 to 70°C/105 to 158°F and is a solid at 23.9°C/75°F when at 100% by weight solids. Crosslinking agent (b) is melt mixed into acrylic polymer (a) to provide a first dispersion and said first dispersion is emulsified in water to provide an aqueous dispersion. In a preferred embodiment, the aqueous electrodepositable primers comprise at least 50% by weight water and an acrylic polymer (a) having one or more salted sites per molecule.